

Title (en)
RETARDATION FILM AND PRODUCTION METHOD

Title (de)
VERZÖGERUNGSFILM UND HERSTELLUNGSVERFAHREN

Title (fr)
FILM DE DÉPHASAGE, ET PROCÉDÉ DE FABRICATION ASSOCIÉ

Publication
EP 3633425 A4 20210303 (EN)

Application
EP 18808793 A 20180518

Priority

- JP 2017108686 A 20170531
- JP 2018019363 W 20180518

Abstract (en)
[origin: EP3633425A1] A phase difference film consisting of a resin C contains a copolymer P containing a polymerization unit A and a polymerization unit B, the phase difference film including a phase separation structure that exhibits a structural birefringence, the phase separation structure including a phase including as a main component the polymerization unit A and another phase including as a main component the polymerization unit B, and the phase difference film having an NZ factor of greater than 0 and smaller than 1; and a production method therefor. Preferably, the phase separation structure has a form of any of lamella, cylinder and spheroid, and the distance between phases in the phase separation structure is 200 nm or less.

IPC 8 full level
B29D 7/01 (2006.01); **B29C 48/00** (2019.01); **B29C 48/08** (2019.01); **B29C 48/305** (2019.01); **B29C 48/40** (2019.01); **B29C 48/88** (2019.01); **G02B 5/30** (2006.01); **B29C 55/04** (2006.01); **B29C 55/14** (2006.01); **B29C 55/16** (2006.01)

CPC (source: CN EP KR US)
B29C 48/0018 (2019.02 - EP US); **B29C 48/08** (2019.02 - EP US); **B29C 48/305** (2019.02 - CN EP KR US); **B29C 48/40** (2019.02 - EP US); **B29C 48/9135** (2019.02 - EP US); **B29C 55/02** (2013.01 - CN KR US); **B29D 7/01** (2013.01 - EP); **C08F 297/04** (2013.01 - EP); **C08J 5/18** (2013.01 - CN KR US); **C08L 53/02** (2013.01 - CN EP KR US); **G02B 1/04** (2013.01 - US); **G02B 5/30** (2013.01 - CN KR); **G02B 5/3083** (2013.01 - EP US); **G02F 1/13363** (2013.01 - US); **B29C 55/04** (2013.01 - EP); **B29C 55/14** (2013.01 - EP); **B29C 55/16** (2013.01 - EP); **B29K 2995/0032** (2013.01 - EP); **C09K 2323/03** (2020.08 - US)

Citation (search report)

- [XAI] JP 2011013378 A 20110120 - NIPPON ZEON CO
- [IA] JP 2009116197 A 20090528 - NITTO DENKO CORP
- [IA] EP 2159610 A1 20100303 - KANEKA CORP [JP]
- [T] JP S61146301 A 19860704 - DAICEL CHEM
- [A] JP H05164920 A 19930629 - SUMITOMO CHEMICAL CO
- [T] RUZETTE ANNE-VALERIE ET AL: "Block copolymers in tomorrow's plastics", NATURE MATERIALS, NATURE PUBLISHING GROUP, LONDON, GB, vol. 4, 1 January 2005 (2005-01-01), pages 19 - 32, XP003030697, ISSN: 1476-4660, DOI: 10.1038/NMAT1295
- See also references of WO 2018221276A1

Designated contracting state (EPC)
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

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EP 3633425 A1 20200408; EP 3633425 A4 20210303; EP 3633425 B1 20230118; CN 110709737 A 20200117; CN 115629437 A 20230120; JP 2022136086 A 20220915; JP 7120228 B2 20220817; JP 7452581 B2 20240319; JP WO2018221276 A1 20200402; KR 102677393 B1 20240620; KR 20200010277 A 20200130; TW 201902964 A 20190116; TW I799419 B 20230421; US 2020183067 A1 20200611; US 2023202090 A1 20230629; WO 2018221276 A1 20181206

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EP 18808793 A 20180518; CN 201880034671 A 20180518; CN 202211252755 A 20180518; JP 2018019363 W 20180518; JP 2019522119 A 20180518; JP 2022102395 A 20220627; KR 20197034779 A 20180518; TW 107117688 A 20180524; US 201816615586 A 20180518; US 202318172312 A 20230222